

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

**PERMIT TO OPERATE A SEPTAGE LAND
APPLICATION SITE**


E-Z Flow Septic Tank & Portable Toilets
Reed Bennett
294 Bennett Road
Goldsboro, NC 27530

is hereby issued a permit to operate a Septage Land Application Site with permit # **SLAS-96-07** on SR 1210 in Wayne County at approximate position 35.30691° N latitude and -78.17266° W longitude. The site is to be operated in accordance with 15A NCAC 13B .0800 Septage Management, the information stated in the approved application, and the conditions of this permit. The unauthorized disposal of any liquid or solid wastes other than those specified in the conditions of this permit will be considered a violation of the conditions of this permit. Failure to comply with the conditions of this permit may result in permit suspension, permit revocation, action for injunctive relief, administrative penalties, or other remedies as provided in G.S. 130A, Article 1., Part 2.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued

8/18/10



Michael E. Scott, Branch Head
Solid Waste Section

Operator: Reed Bennett
SLAS #: 96-07
County: Wayne

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Permit Conditions:

1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Reed Bennett and approved by the Division. This site consists of one field containing 7.6 acres. Each year the field shall be planted in soybeans at a seeding rate of 72 lbs/ac in June or July and in rye at a seeding rate of 2 bu/ac in October or November. Any additional fertilizer applied to the field shall be in accordance with the NCDA soil test results for the crops grown. The crop shall not be harvested within 30 days of any septage application and all harvested grain from this site shall not be used for human consumption. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.
3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Reed Bennett. The drainageway to the north of the permitted site shall be buffered by a 100-foot wide strip of fescue. Fertilizer and lime shall be applied to the buffer as recommended by soil test results. Fertilizer shall be applied to the fescue in the spring and fall. Any site improvements noted in the plan must be installed within 30 days of plan approval. The site shall be operated and erosion and runoff control measures maintained in such a manner as to prevent migration of wastes off of the designated waste receiving site. The installation of groundwater monitoring wells may be required.
4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (local, state and federal) which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the requirements of 40 CFR 503.
5. This permit may be modified or reissued to incorporate any conditions, limitations and monitoring requirements the Division of Waste Management deems necessary to adequately protect the environment and public health.
6. **This site is only permitted for the land application of domestic septage, grease trap pumping, portable toilet waste, and commercial/industrial septage. Commercial/industrial septage shall only be land applied after the waste from each source is tested and the results approved by the Solid Waste Section.** Domestic septage pH shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application.
7. **This site contains approximately 7.6 acres that are available for the land application of septage.** The maximum annual application rate shall be 50,000 gallons per acre per year, for a total, maximum annual application of 380,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over the permitted area. Monthly septage applications shall not exceed the monthly relative application rates given in the approved nutrient management plan for the site.

Operator: Reed Bennett
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County: Wayne

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8. An approved above ground septage detention system with a minimum design capacity of 7,500 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.
9. Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete. Septage shall not be applied during periods of high soil moisture.
10. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee shall discharge septage at this site without prior appropriate notification and written approval of the Division of Waste Management.
11. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure.
12. **This permit shall expire August 18, 2015.** Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838 (e) (1) of the NC Septage Management Rules and 40 CFR Part 503.17 (b) of the Federal Register. This permit is non-transferable.
13. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division of Waste Management upon request.
14. Any duly authorized officer, employee, or representative of the Division of Waste Management may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.
15. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site.
16. The areas that can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line or within 100 feet of any ditch.
17. The soybean yield shall be measured for the permitted field each Fall and submitted to the Division. The measurement shall be in bushels and no other area except the permitted field shall be included in the yield measurement.



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

August 24, 2010

Mr. Reed Bennett
E-Z Flow Septic Tank & Portable Toilets
294 Bennett Rd.
Goldsboro, NC 27530

**RE: SLAS-96-07 and SDTF-96-04 Permit Renewals
E-Z Flow Septic Tank & Portable Toilets
SR 1210 in Wayne County**

Dear Mr. Bennett:

The NC Division of Waste Management has reviewed your application to renew and modify Septage Land Application Site permit, **SLAS-96-07**, in Wayne County. Your application for permit renewal and modification has been approved in accordance with NC Septage Management Rules and your Permit, **SLAS-96-07**, is enclosed. When communicating to the Division about this permit, please refer to it as "**SLAS-96-07**".

Please read your entire SLAS Permit carefully. Your nutrient management and soil erosion and runoff control plans have been included in your permit's conditions. In particular, please pay close attention to **Permit Conditions 2, 3, 6, 7, 12, and 17**. Condition 2 incorporates specific details from your nutrient management plan and includes the addition of 1.6 acres to the field. **Condition 3 states that "the drainageway to the north of the permitted site shall be buffered by a 100 feet wide strip of fescue."** **Condition 6 states that this site is permitted for the land application of domestic septage, grease trap pumping, portable toilet waste, and commercial/industrial septage. Remember that commercial/industrial septage can only be "land applied after the waste from each source is tested and the results approved by the Solid Waste Section."**

Condition 7 states that **this site contains approximately 7.6 acres approved for the land application of septage. The total, maximum annual application amount for this site shall be 380,000 gallons.** Condition 12, states that this permit is set to expire on **August 18, 2015** and that an application for permit renewal and your septage application logs should be submitted at least ninety (90) days prior to the expiration of your permit. **Condition 17 states that "the soybean yield shall be measured for the permitted field each Fall and submitted to the Division."**

CONTINUE ON BACK

The Division has also reviewed your application to renew septage detention and treatment facility, **SDTF-96-04**, in Wayne County. Your application for permit renewal has been approved in accordance with NC Septage Management Rules and your Permit, **SDTF-96-04**, is enclosed. When communicating to the Division about this permit, please refer to it as "**SDTF-96-04**".

Read your entire SDTF Permit carefully. As you read the SDTF Permit, please pay close attention to **Conditions 7, 8 and 9**. Note that Condition 7 states that this facility has five steel tanks for a total site capacity of 85,000 gallons for the storage of domestic septage, grease trap pumping, portable toilet waste, and commercial/industrial septage. Condition 8 notes that only the owner stated in this Permit or an employee of the Firm can discharge septage at this facility. Approval must be granted by the Division prior to anyone else using these tanks. And finally, Condition 9 states that **"This permit shall expire August 3, 2013." and that "an application for permit renewal shall be submitted at least 90 days prior to the permit expiration date."**

Again, please pay close attention to the enclosed permits. Permit **SLAS-96-07** covers your septage land application site and Permit **SDTF-96-04** covers your septage detention site. To avoid violations to the NC Septage Management Rules and your permit, please pay close attention to the enclosed permits. Violations to the NC Septage Management Rules or these permits could subject you to administrative penalties of up to \$15,000 per violation per day. If you have any questions concerning your permits or septage in general, please do not hesitate to contact me at (919) 508-8515.

Sincerely,



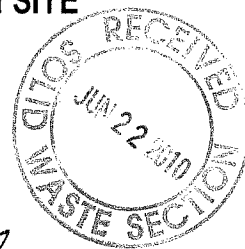
Chester R. Cobb, Soil Scientist
Composting and Land Application Branch

Enclosures

cc: Central Files
Joe Gallo, Environmental Senior Specialist
Wayne County Health Department

APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
401 Oberlin Rd., Ste. 150, Raleigh, N.C. 27605



I. Site and Operator Information

1. Applicant E-2 Flow Septic & Portable Toilets Reed
Address 294 Bennett Rd Bennett
Goldsboro N.C. 27530
Phone 919-922-7910 919-689-2974

2. Contact person for site operation (if different from applicant):
Title or position Owner Phone 919-689-2974
Address 294 Bennett Rd 919-922-7910
Goldsboro N.C. 27530

3. Landowner Reed Bennett
Address 304 Bennett Rd
Goldsboro N.C. 27530

4. Site Location: County Wayne State Road Number 1210
Directions to site: Hwy 13 North From Newton Grove + Crantham
Left ~~at~~ at Light First Left Bennett Rd 1/2 Mile on Right

5. Indicate whether request is: new _____ renewal _____ modification X

For a permit renewal or modification, provide the following information:

Existing site permit number: 96-07 permit expiration date: 12-17-09

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 8.9
acres.

7. Substances other than septage or grease trap pumpings previously disposed of on the site:
(a) None /, or (b) Attach a list indicating other substances, the amounts discharged, and the dates of discharge.

8. Attach written, notarized landowner authorization to operate a septage disposal site signed by the landowner (if the permit applicant does not own the property). **If a corporation owns the land use a corporate landowner authorization form. If limited liability company owns the land, use a limited liability company landowner authorization form.**

9. Attach site evaluation report, including aerial photograph and soil analysis with metals results, unless the Division prepared the report.

10. Attach a vicinity map (county road map showing site location).

(over)

II. Site Management Information:

The following information shall be included with the application form:

1. Nutrient Management Plan
2. Soil Erosion and Runoff Control Plan

3. Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): _____

4. Types of septage proposed to be discharged at the site (check all that apply):

- (a) Domestic septage pumped from septic tanks ☒
- (b) Grease trap pumpings ☒
- (c) Portable toilet waste ☒
- (d) Commercial / Industrial septage ☒

5. Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary): We will treat Septage with Hydrated Lime. we will use the lime to stabilize the domestic Septage to pH 12 For 30 Min. Grease will be treated For 2 hrs at a pH 12 Prior to land application

6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): use pump truck to Spread Evenly across Land.

7. Demonstration from the appropriate state or federal government agency that the land application site complies with the Endangered Species Law ** or if any part of the site specified is not agricultural land (use additional paper to explain if necessary): Site is agricultural land.

III. Certification

I hereby certify that:

1. The information provided on this application is true, complete, and correct to the best of my knowledge.
2. I have read and understand the N.C. Septage Management Rules, and
3. I am aware of the potential consequences, including penalties and permit revocation, for failing to follow all applicable rules and the conditions of a Septage Land Application Site permit.

Reed O. Bennett
Signature***

6-21-10
Date

Reed O. Bennett
Print name

6-21-10
Title

Note: This application will not be reviewed until all parts of the application are complete.

* Refer to Section .0821(e) of the N.C. Septage Management Rules.

** Refer to Section .0821(g) of the N.C. Septage Management Rules.

***Signature of company official required.





EZ FLOW SEPTIC
NUTRIENT MANAGEMENT PLAN FOR
SEPTAGE APPLICATIONS TO BERMUDAGRASS
BENNETT ROAD SITE
PARCEL NO. 2546677524
AUGUST 1, 2010

A. General Information:

1. This nutrient management plan serves to combine and update two individual nutrient management plans that have been previously written for this property. The first plan is for the field adjacent and due west of the owner's house along Bennett Road. This plan was noted as SLAS-96-07. The second plan was written in 2010 for the addition of 1.6 acres due west of the existing permitted field. The combined acreage for the approved area is 7.6 acres, and will be managed as one field and one consistent crop rotation: soybeans and winter ryegrass. The previous plan shows soil types as Norfolk, Lynchburg, and Rains- however- the Lynchburg and Rains soils would not be suitable for septage application as per current rules. The area will be managed as Goldsboro soils, as this is the soil type that was identified in 2010, and this soil would serve as the median for purposes of nutrient management planning.
2. Periodic sampling (at least 1year) of the septage will be conducted for waste analysis.
3. The approved field contains approximately 7.6 acres.
4. The dominant soil series is Goldsboro loamy sand, 0-2 percent slopes.
5. The limiting nutrient designed for the site is nitrogen.
6. Septage will not be applied where the site is untrafficable (untrafficable is defined as soil that will allow a loaded truck to leave a depression in sod greater than 3 inches in depth). As these soils are moderately well drained with good surface and internal drainage, that should only occur after heavy or prolonged periods of rain or snow.
7. All nitrogen recommendations will be 75% of the realistic yield expectation should the crops be only grazed.
8. Septage storage shall be provided to account for the average volume of septage pumped per week or an alternative plan such as disposal at a waste treatment plant should be in place.

B. Crops to be grown and approximate planting times:

This field will be utilized for a crop rotation of rye and soybeans. Rye will be planted in October-November at a seeding rate of 2 bu/ac. Soybeans will be planted in June-July at a seeding rate of approximately 72 lbs/ac.

C. Nitrogen needs for crops grown:

R.Y.E. = Realistic Yield Expectation

N App. Rate = Suggested N application rate based on R.Y.E. for soil type. See attached RYE table.

Crop	R.Y.E.	N App. Rate		lbs. N/ac
Rye (grain)	65 bu/ac	x 2.09 lbs N/bu	=	136
Soybeans (grain)*	38 bu/ac	x 3.91 lbs N/bu	=	<u>148</u>
		Total	=	284

*This uses the closest RYE application from the Nutrient Management Tables: manured, full-season soybeans. The double-cropped soybeans could also be considered, but it too shows a RYE of 38 bushels/acre.

At a standard septage rate of 2.6 pounds N/1000 gallons, this equates to a septage application rate of 109,230 gallons per acre per year. ***Note that an application rate of 50,000 gallons per acre per year can only be exceeded with prior approval from the Solid Waste Division and with management from a certified land application operator.***

50,000 gallons per acre per year will supply 130 pounds N/acre on average. This application should be split between the ryegrass and a single pre-plant application to soybeans, as soybeans can generate their own N.

D: Crop Plan

Month	Field 1
January	rye
February	rye
March	rye
April	rye
May	rye
June	rye *
July	soybeans (recommended planting 6/15-7/15)
August	soybeans
September	soybeans
October	soybeans*
November	rye + (recommended planting 10/20-11/8)
December	rye

+ planted at some time during the month

* harvested at some time during the month, into November pending weather and crop

Note: planting and harvesting dates will vary according to variety selected and weather conditions. Adjustments to septage application rates should likewise follow planting and fertilization guidance.

E: Relative Application Rate:

For rye, septage to be land applied 7 to 10 days before planting and during springtime.

For soybeans, septage to be land applied from preplant until they reach 3 to 6 inches tall.

<u>Month</u>	<u>Field Application Rate (see below for gallons/acre)</u>
January	Low
February	Low
March	Medium
April	Medium
May	Low-None (preparation for harvest)
June	None- rye; High- preplant soybeans
July	Med
August	Low (pending crop growth stage)
September	None
October	None
November	High (pre-plant rye)
December	Med

None = 0 gallons; Low = 5,000 gallons;
Medium = 10,000 gallons; High = 15,000 gallons

NOTE: Cumulative application rate is not to exceed the permitted application rate. Annual application rate is not to exceed 50,000 gallons per acre unless operated by a certified land application operator with DWM approval.

The preceding information is based on septage being evenly applied over the entire permitted site by broadcast septage application. Should there be an interest in injecting or incorporating the septage, the application rates will be lowered and must be adjusted. Septage injection must be performed with special equipment so as to not injure the crop stand. Discuss this option with the Solid Waste Management staff prior to investing in injection equipment.

F. Additional Fertility Requirements (not including the limiting nutrient from the waste stream)

Nitrogen, phosphorus and / or potassium will be added in accordance with the soil test results for the crops grown in order to achieve realistic yield expectations based on the soil at the land application site and nutrient loading rates. Soil pH shall be amended as recommended in the soil test report. PLEASE NOTE THAT LIME-AMENDED SEPTAGE WILL RAISE SOIL pH. YOU SHOULD CLOSELY MONITOR SOIL pH AND ALSO HAVE THE SEPTAGE CHECKED FOR ITS LIME VALUE TO INSURE THAT THE SOIL pH DOES NOT BECOME TOO HIGH. THE COST OF SEPTAGE ANALYSIS FOR LIME VALUE IS CURRENTLY \$10.00 WITH THE NCDA&CS LABORATORY.

The quality of the crop stand should dictate when and how much septage is applied. Lighter applications are warranted when the nutrient management plan calls for low applications or when the threat of ponding or septage runoff off the site is higher. The operator should calibrate and test the spreading equipment such that they are familiar with speeds and settings to apply appropriate application rates. Regular review of the crop stand quality is critical to maintain crop health and adequate erosion control. At the first sign of plant stress, both soil tests and plant tissue analyses are encouraged to provide for sound management

decisions. The crops should be fertilized with septage and/or commercial fertilizer to maintain a good erosion control base across the application area and in buffer areas.

- G. A 30 day waiting period must be observed between the last application of septage and harvest. Thus, septage will not be applied to the rye crop in May prior to harvesting rye for grain in June and to the soybean crop prior to harvesting in October - November.


H. Yield Documentation, Nutritive sampling, Nutrient Loading Logs:

Each harvest will be documented and the yield recorded in cooperation with the County Extension Office. If assistance from the County Extension Office is not available, 10-15% of each harvest will be sampled to obtain a representative sample for nutritive analysis. The total yield will also be documented based on actual weight of the harvested material rather than estimates from harvesting equipment manuals. A subsample of 10-15% of the harvested material can be used for yield determination.

A copy of the nutritive analysis and yield documentation should be mailed to the Division after each harvest. Nutrient loading logs will also be submitted to the Division each month listing the gallons / type of waste discharged, lbs of nutrients applied (this event), lbs of nutrients applied (year to date), total gallons applied (year to date), and pH at application.

I. Soil Erosion Plan:

1. The slope of the site is less than 2 percent.
 2. The site will be covered with vegetation, rye, or soybeans.
 3. Erosion and runoff should be controlled by the vegetation.
 4. The drainageway on the north side of the application site will be buffered with fescue, a cool-season grass.
 5. Fertilizer and lime should be applied to buffer as needed to maintain good growth and plant vigor. A soil analysis is recommended to determine fertility and lime requirements. Fertilizer should be applied to fescue in the spring and fall.
 6. Buffers should be mowed as needed to control weeds and prevent tree encroachment. Mowing during the months of August through December will enhance these sites for small game nesting habitat during the spring and early summer months.
-

Submitted by:  Date: 8/10/10
Site Operator

Plan prepared by: Karl Shaffer, L.S.S., Certified Technical Specialist - Nutrient management
Planner Date: August 1, 2010

Address: 685 Sanford Road

Pittsboro, NC 27312

Phone: (919) 542-5803, (919) 244-1984

Email: kshaffer@mindspring.com

Attachments:

- 1) RYE table for Goldsboro soils in Wayne County
- 2) USDA official series description for Goldsboro soils
- 3) Site field description for Goldsboro soils

The grain that we produce
is not used For human Consumption

Need but
6-25-10